

## Town, Village and Agency Efforts to Improve Water Quality



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- **Overview of the Stormwater Coalition**
- **Overview of the Phase II Regulations**
- **Annual Report Requirements**
- **Opportunities for Education/Public Participation Events**

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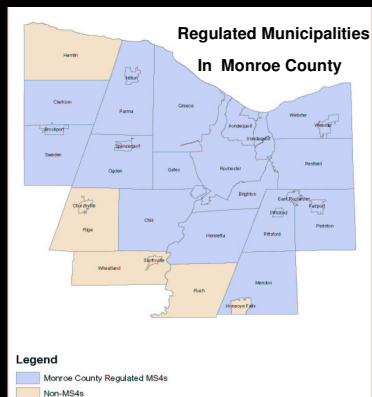
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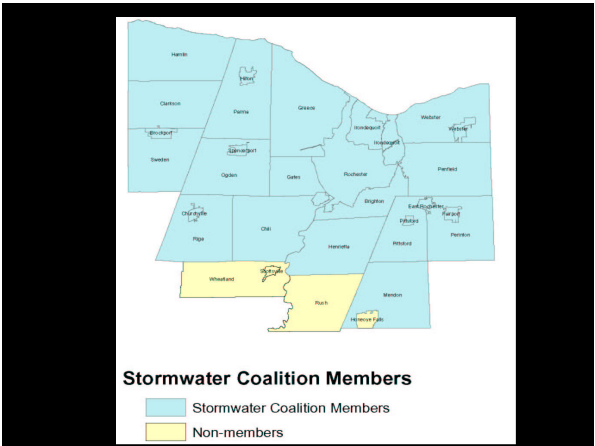
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### Stormwater Coalition of Monroe County Members

Towns		
Brighton	Henrietta	Perinton
Chili	Irondequoit	Pittsford
Clarkson	Mendon	Riga
Gates	Ogden	Sweden
Greece	Parma	Webster
Hamlin	Penfield	

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### Stormwater Coalition of Monroe County Members

Villages	
Brockport	Hilton
Churchville	Pittsford
East Rochester	Spencerport
Fairport	Webster

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Stormwater Coalition of  
Monroe County  
Members

Agencies

City of Rochester Pure Waters District in conjunction with the  
Monroe County Department of Environmental Services

Monroe County Department of Transportation

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Partner Agencies

Monroe County Department of Public Health -  
Environmental Quality Section

Monroe County Soil and Water conservation  
District

Water Education Collaborative at the Rochester  
Museum and Science Center

Cornell Cooperative Extension of Monroe County

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Partner Agencies

Monroe County Department of Public Health -  
Environmental Quality Section

- Staff the Stormwater Coalition

- Oversee the activities involved with all  
aspects of the coalition activities as well  
as assist municipalities and agencies  
to meet the regulations

Todd Stevenson - 274-7638  
Karen Paris Tuori - 274-6397

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## Partner Agencies

Monroe County Soil and Water Conservation District

- Develop training sessions for municipal staff to conduct construction site inspections
- Respond to complaints from citizens regarding construction violations

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## Partner Agencies

Monroe County Soil and Water Conservation District

- Conduct plan reviews for compliance to the regulations
- Involved with education events such as Conservation Field Days Envirothon

Caroline Myers - 473-2120 ext. 110

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## Partner Agencies:

Water Education Collaborative at the Rochester Museum & Science Center

- Watershed Clean-Up Event scheduled for September 17, 2005
- Public education campaign using the mass media in partnership with the Ad Council of Rochester

Contact Noreen Mazurowski - 271-4552 ext. 324#  
[www.thewec.org](http://www.thewec.org)

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## Partner Agencies

Cornell Cooperative Extension of Monroe County

- Storm drain stenciling
- Volunteer stream & stormwater outfall monitoring
- Environmentally friendly lawn care education
- Stream corridor planting
- Presentations on reducing stormwater pollution at local schools and community events

Contact Kimie Romeo at 703-4690

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## Presentation Outline

Water Pollution

❖ The National Clean Water Program

Why Stormwater ?

❖ The Importance of Imperviousness

❖ The "Good Drainage" Paradigm

❖ Stormwater Runoff Pollutants

❖ Effects of Development on Streams

The NYS Stormwater Program

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## 1972 Federal Clean Water Act\*



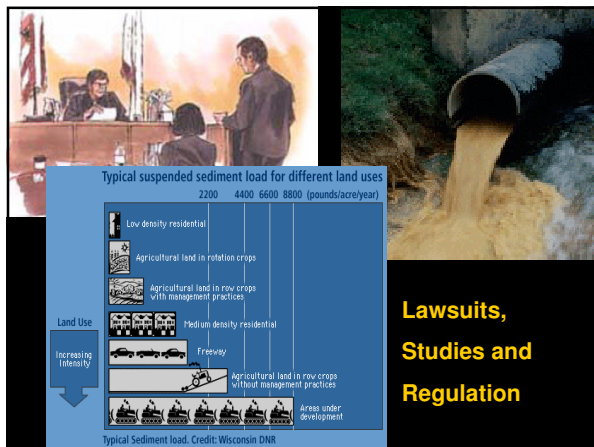
Created "individual permits"  
National Pollutant Discharge  
Elimination System (NPDES)

\*water pollution control act

Program delegated to NYS  
State Pollutant Discharge  
Elimination System  
(SPDES)

ECL Article 17&  
6 NYCRR

## \$ Funding For Clean Water



Lawsuits,  
Studies and  
Regulation

## 1987 CWA Amendment: Stormwater

Revisions added **STORMWATER**  
as a pollutant (nonpoint source) that could  
be covered under a “general” permit  
(vs. individual permits for point sources)

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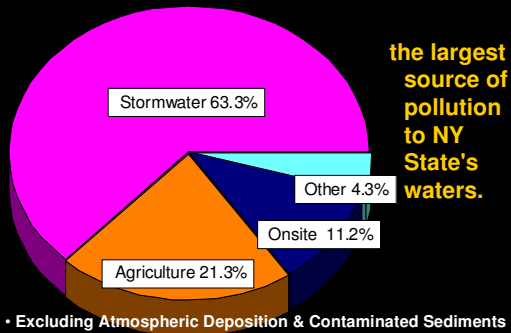
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## Stormwater runoff is



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## Stormwater Runoff is:



Rain or  
snowmelt  
that flows  
over land  
or rooftops,  
paved areas,  
bare soil and  
lawns –  
picking up  
pollutants.

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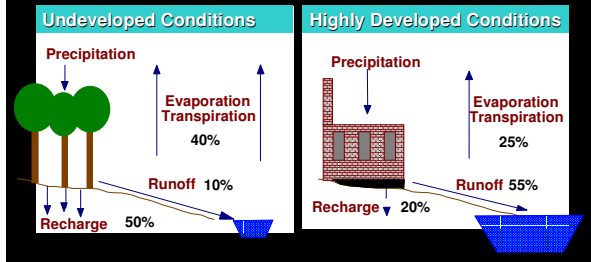
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Stormwater runoff is a natural part of the hydrologic cycle ... however as land is developed, runoff increases.




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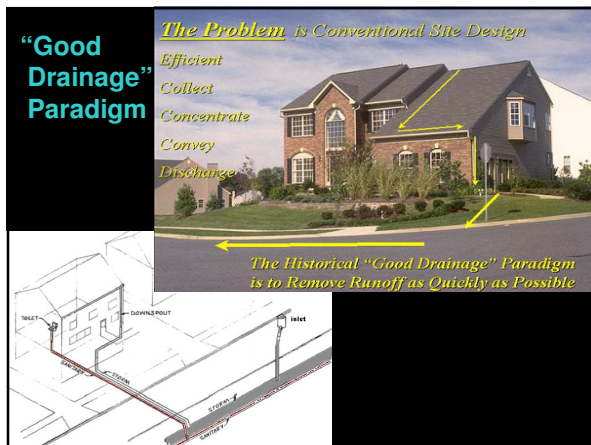
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## Effects of Development on Streams- A chain of events...

- Increase in frequency & intensity of flooding
- Reduction in groundwater recharge - reduced stream flow during dry weather
- Increase in streambank erosion
- Loss of habitat

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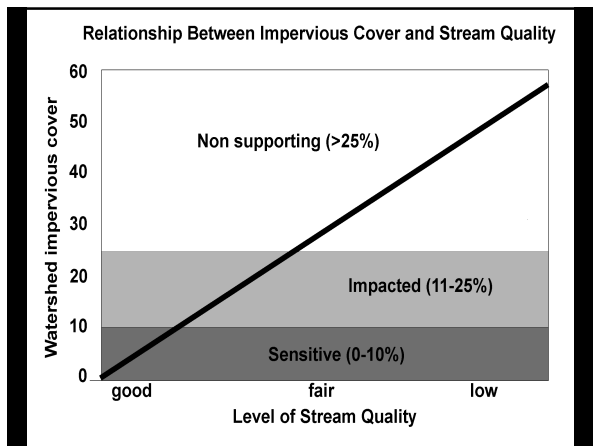
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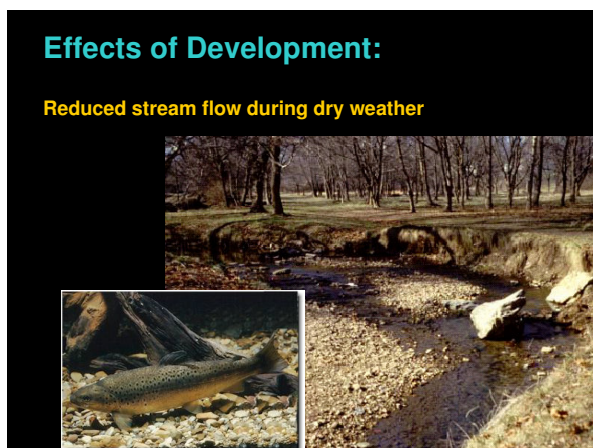
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## Effects of Development:

### Streambank erosion



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## Effects of Development:



### Loss of Habitat

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## Stormwater Runoff Pollutants from Development



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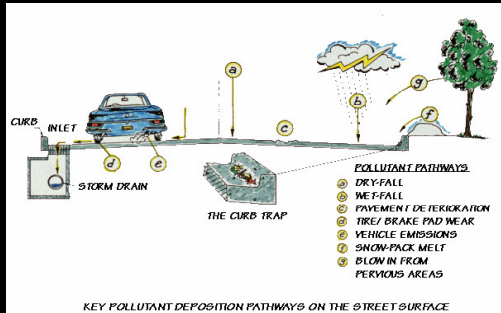
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## How does it get there? Stormwater Pollutant Pathways



## CWA - Two Phase Stormwater Permitting

1990s

### Phase I

- Medium and Large Municipalities (>100,000 pop.) "MS4s Permit"
- Construction Activities over 5 acres "construction permit"

2003

### Phase II added

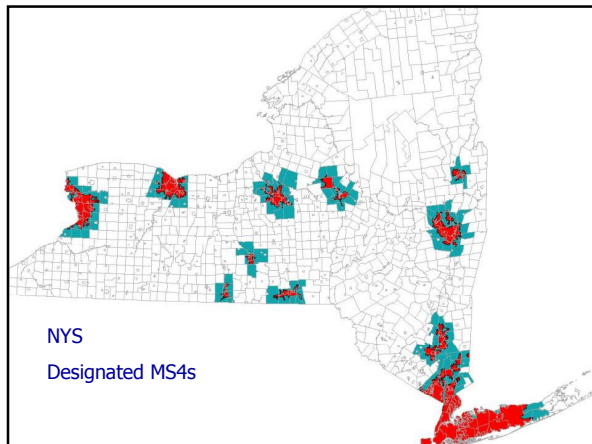
- Small Municipalities (~50,000 )
- One or more acres of disturbance from construction activities

## What is an MS4?

A Municipality that owns or operates a Separate Storm Sewer Systems including:

- roads with drainage systems
  - municipal streets
  - catch basins
  - curbs
  - gutters
  - ditches
- man-made channels
- storm drains





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## Requirements of MS4 Permits

Develop & Implement 6 point program by 2008

- **Six Minimum Control Measures:**
  - Public Education and Outreach
  - Public Involvement and Participation
  - Illicit Discharge Detection and Elimination
  - Construction Site Runoff Control
  - Post-Construction Stormwater Management
  - Pollution Prevention/Good Housekeeping

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## 1. Public Education & Outreach

Give residents information about their role in the stormwater program and how they can support the municipality in achieving the community goals for protecting and/or improving water resources.



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## 2. Public Participation & Involvement



- Action Areas
  - Seek public comment on annual report
  - Citizen volunteer groups

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## NYSDEC Permit GP-02-02 Annual Report

- “The MS4 must take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard, and the MS4 must document these actions in the stormwater management plan.”
- “Develop, implement, and enforce a stormwater management program to reduce the discharge of pollutants to the *maximum extent practicable*.”

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## Annual Report Compliance

- Prior to submitting the annual report, present the draft at a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the report.

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## 2004 – 2005 Report

### PUBLIC EDUCATION AND OUTREACH

- Stormwater Coalition's "*Make Your Home the Solution to Stormwater Pollution*".
- Education & Public Participation Task Group's Stormwater door hanger.
- Water Education Collaborative (WEC)
- Presentations at local schools.
- Exhibits at community events with water quality component.
- Cornell Cooperative Extension's *Great Lawns/Great Lakes* program.
- Monroe County's Household Hazardous Waste Collection Program.
- Pesticide Amnesty collections.

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## 2004 – 2005 Report

### PUBLIC INVOLVEMENT/PARTICIPATION

- Public meeting for Annual Report.
- Community Water Watch Program.
- Storm drain stenciling.
- International Coastal Clean Up Day.
- Local Conservation Boards, Environmental Protection Boards, and Watershed Management Committees.

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## 2004 – 2005 Report

### PUBLIC INVOLVEMENT/PARTICIPATION



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## 2004 – 2005 Report

### ILLICIT DISCHARGE DETECTION/ ELIMINATION

- Illicit Discharge Task Group's Draft Model Ordinance.
- IDDE training session for municipalities.
- Monroe County's Adopt an Outfall Program.
- Mapping and inspection of outfall structures.
- Development of plans to identify illicit connections.

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## 2004 – 2005 Report

### CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- Construction Task Group's Draft Model Ordinance.
- Development of inspection check lists for municipalities.
- Education efforts to train municipalities , contractors, developers, and engineers.

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## 2004 – 2005 Report

### CONSTRUCTION SITE STORMWATER RUNOFF CONTROL



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## 2004 – 2005 Report

### POST CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- Construction Task Group's Draft Model Ordinance.
- Development of best management practices for municipal operations.
- Educate and train municipal field staff.

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## 2004 – 2005 Report

### POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- Training program for Roadway Stormwater Management BMP's.
- Develop inspection check list for municipal operations.
- Review storm network maintenance measures.

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## 2004 – 2005 Report



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## 2004 – 2005 Report

### CITIZEN INPUT

- Review draft Annual Permit (Town, Village, County).
- Submit your comments to your municipality or agency
- Final report due at NYSDEC Albany offices by June 1, 2005.
- GET INVOLVED!!!!

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## Coming Attractions

- Free Educational Materials
- Construction Site Stormwater Ordinance
- Post Construction Stormwater Ordinance
- Illicit Discharge Ordinance
- Opportunities for public participation

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## Thanks to:

- Town of Penfield for hosting this meeting
- Speakers for presenting the information
- Coalition members for cooperating to improve water quality
- Partner agencies for being involved and sharing their expertise

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## For additional information

- **Contact the Coalition Staff:**

- **Todd Stevenson      274-7638**

- **Karen Paris Tuori      274-6397**

**[www.thestormwatercoalition.org](http://www.thestormwatercoalition.org)**

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